REMARKS

Claims 1-22 were pending prior to the entry of the Amendments herein. Claims 12 and 22 are amended herein. Claims 1-11, 13, 15 and 18 are canceled without prejudice. New Claims 23-25 are added. Claims 12, 14, 16, 17 and 19-25 are therefore pending.

Election/Restrictions

Applicants hereby affirm the election, without traverse, to prosecute the invention identified by the Examiner as Group II (i.e., Claims 12-22). In this amendment, Applicant has canceled the unelected claims (i.e., Claims 1-11) without prejudice.

Response to Claim Objections

In the September 19, 2005 Office Action, Claims 12-22 stand objected to because Claim 12, line 2, reads, "a plurality or process modules." Applicants thank the Examiner for noting that the word "or" was intended to be the word "of." Please amend Claim 12 as indicated in the listing of Claims provided above. Accordingly, Applicants respectfully request that the objection to Claims 12-22 be withdrawn.

Response to Rejections under 35 U.S.C. § 112

In the September 19, 2005 Office Action, Claims 16-18 stand rejected under 35 U.S.C. § 112, ¶ 2 as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicants regard as the invention. Specifically, Claims 16-18 each include the limitation "the network," but there was insufficient antecedent basis for this limitation in the Claims. Please amend Claim 12 as indicated in the listing of Claims provided above to add reference to "a network," thereby providing Claims 16-18 with antecedent basis. Accordingly, Applicants respectfully request that the rejection of Claims 16-18 be withdrawn.

Response to Obviousness-Type Double-Patenting Rejection

In the September 19, 2005 Office Action, Claim 22 stands rejected on the basis of obviousness-type double-patenting over Claim 5 of U.S. Patent No. 6,736,929. Applicants respectfully traverse the basis for this double-patenting rejection. Nevertheless, to advance prosecution, Applicant is submitting with this amendment a Terminal Disclaimer with respect to

U.S. Patent No. 6,736,929 and in accordance with 37 C.F.R. § 1.321(a). Accordingly, Applicants respectfully request that the rejection of Claim 22 be withdrawn.

Amendments

Applicants have amended Claim 12 to incorporate the limitations of canceled Claim 13. Claims 13, 15, and 18 have been canceled. Claim 22 has been amended to exclude language that is repetitive after the amendment to Claim 12, from which Claim 22 depends. Applicants have also added dependent Claims 23-25 to better protect the subject matter that Applicants view as the inventions.

Response to Rejections under 35 U.S.C. § 102(b)

In the September 19, 2005 Office Action, Claims 12-21 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,122,566 to Nguyen et al. Applicants respectfully traverse the rejection because Nguyen fails to teach, either expressly or inherently, the elements of the Claims.

<u>Claim 12</u>

Applicants submit that Nguyen does not provide all the limitations of Claim 12. Nguyen does not disclose a method "including . . . at least one off-line process module not included in the production route." Nguyen teaches optimization of a system wherein all process modules are on-line. The method checks to see if the module is busy or free, and, if busy, how much longer it will be busy. *See* Nguyen at Fig. 5 and col. 7, ll. 31-45. The dynamic look ahead program uses this information to optimize the sequence of the wafers through the modules. *See* Nguyen at Figs. 7 and 8A-8C. However, the program taught by Nguyen does not check to see whether a process module is on-line or off-line, nor does it use such information to move the workpieces among the process modules. In fact, the Examiner notes on Page 6 of the September 19, 2005 Office Action that Nguyen fails to teach or suggest a production route including a number of on-line process modules defined in the production route and at least one off-line process module not included in the production route.

As amended, Claim 12 recites:

12.　　A method of processing a workpiece using a semiconductor workpiece processing tool including a plurality of process modules having a robot

loading window and a control system on a network, the control system including a user interface, system controller, and process module controller associated with the process modules, comprising the steps of:

storing a production route defining movement of the workpiece among a number of the process modules, the production route including a number of on-line process modules defined in the production route and at least one off-line process module not included in the production route;

storing a number of recipes for processing the workpiece, the recipes each having a unique name and a number of processing parameters associated therewith;

selecting the next process module in the production route when a workpiece is substantially completed with an existing process in the production route; and

moving the workpieces among the process modules in accordance with the selecting step.

Claim 12 recites a method "including . . . at least one off-line process module not included in the production route." As noted in Paragraph [0023] of the present Application, this off-line module allows for processing, maintenance, and other operations without stopping the production line.

[0023] In one aspect of the invention, the production route includes a number of on-line process modules defined in the production route. In the exemplary aspect, at least one off-line process module is not included in the production route. Referring to FIG. 2A, process modules A, B and C are on-line and process module D is off-line. An off-line process module can accept a workpiece through the manual window and to perform a recipe thereon. This feature of continued operation while certain process modules undergo maintenance and testing can improve productivity since the production line does not need to stop when a process module is undergoing maintenance and testing.

Therefore, Applicants submit that Claim 12 is patentably distinguished over Nguyen. Applicants respectfully request that the Examiner withdraw the rejection of Claim 12 and to pass Claim 12 to allowance.

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Claims 14-21

As described above, Applicants submit that Claim 12 is patentably distinguished over Nguyen. Claims 14, 16, and 22 each depend from Claim 12, Claim 17 depends from Claim 14, and Claims 19 and 21 depend from Claim 16. Thus, Claims 14, 16, 17, and 19-21 each include all the limitations of Claim 12, which are not disclosed by Nguyen, as well as other limitations of particular utility. Therefore, Claims 14, 16, 17, and 19-21 are each patentably distinguished over Nguyen. Applicants respectfully request that the Examiner withdraw the rejections of Claims 13-21 and to pass Claims 14, 16, 17, and 19-21 to allowance.

Response to Rejections under 35 U.S.C. § 103(a)

In the September 19, 2005 Office Action, Claim 22 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Nguyen in view of U.S. Patent No. 5,620,578 to Hurwitt. Applicants respectfully traverse the rejection because Nguyen, either alone or in combination with Hurwitt, fails to teach or suggest the elements of the Claims.

Claim 22

The Examiner states that Nguyen teaches many of the limitations of Claim 22, but that Nguyen does not teach or suggest a number of process modules including a manual loading window and a production route including a number of on-line process modules defined in the production route and at least one off-line process module not included in the production route. Hurwitt teaches a manual loading window, but does not teach or suggest a production route including a number of on-line process modules defined in the production route and at least one off-line process module not included in the production route. Thus, Nguyen, alone or in combination with Hurwitt, fails to teach or suggest the elements of Claim 22. Therefore, Claim 22 is patentably distinguished over Nguyen in view of Hurwitt. Applicants respectfully request that the Examiner withdraw the rejection of Claim 22 and to pass Claim 22 to allowance.

Summary

Applicants respectfully submit that all of the pending Claims are in condition for allowance. Applicants respectfully submit that the Examiner withdraw the rejections and to pass Claims 12 and 14, 16, 17, and 19-25 to allowance.
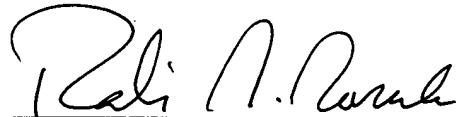
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Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

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Dated: 12-19-05

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